Remarks

Favorable reconsideration of this application, in view of the above amendments and in light of the following remarks and discussion, is respectfully requested.

Claims 1-3, 7-25, and 42-50 are currently pending in the application; independent Claims 1, 7, and 50 having been amended by way of the present response. Applicants respectfully assert that support for the changes to the claims is self-evident from the originally filed disclosure, including the original claims, and that therefore no new matter has been added.

In the outstanding Office Action Claim 50 was rejected under 35 U.S.C. § 112, second paragraph; and Claims 1-3, 7-11, 13, 42, 43, 45, and 50 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,943,669 to Numata.

Initially, Applicants express thanks for the Examiner's indication that Claims 12, 14-25, 44, and 46-49 are allowed.

As stated above Claim 50 was rejected under 35 U.S.C. § 112, second paragraph. In response, Applicants have amended the claim to remove the recitation of "extracted." Thus, Applicants respectfully request that the rejection of Claim 50 under 35 U.S.C. § 112, second paragraph, be withdrawn.

As stated above Claims 1-3, 7-11, 13, 42, 43, 45, and 50 were rejected under 35 U.S.C. § 102(b) as being anticipated by Numata. Applicants respectfully request that the rejection of the claims be withdrawn for the following reasons.

The present invention is directed to document classification systems and processor readable medium storing program codes. Independent Claim 1 recites displaying means for displaying items of document data input by inputting means. Designating means are used for designating a portion of the items displayed in the displaying means. Converting means are used for converting the document data into converted data so that the converted data contains

only data corresponding to the items designated by the designating means which are a portion of the items of the document data.

Independent Claim 7 recites second program code means for displaying items of document data input by first program code means. Third program code means are used for designating a portion of the items displayed by the second program code means. Fourth program code means are used for converting the document data into converted data so that the converted data contains only data corresponding to the items designated by the third program code means which are a portion of the items of the document data.

Independent Claim 10 recites vector producing means for producing a document feature vector with respect to document data based on analysis information. Transforming function calculating means are used for calculating a representation transforming function used for projecting the document feature vector onto a space in which similarity between the document feature vectors is reflected with a dimensional number different from a dimensional number of the document feature vector.

Independent Claim 42 recites third program code means for producing a document feature vector with respect to document data based on analysis information. Fourth program code means are used for calculating a representation transforming function used for projecting the document feature vector onto a space in which similarity between the document feature vectors is reflected with a dimensional number different from a dimensional number of the document feature vector.

Independent Claim 50 recites displaying means for displaying items of document data input by inputting means. Designating means are used for designating a portion of the items displayed by the displaying means. Converting means are used for converting the document data into converted data so that the converted data contains only data corresponding to the

items designated by the designating means which are a portion of the items of the document data.

Regarding the rejection of independent Claim 1, Numata is directed to a document retrieval device. As shown in Figure 1, for example, of Numata, a fundamental vector generation section 4 partitions a logical structure of documents that were analyzed in logical structure analysis section 3 by means of classification units that were designated by classification unit designation section 2, key words are extracted from each classification unit, and fundamental vectors are generated based on the extracted key words.¹

The Office Action asserts that the fundamental vector generation section 4 of Numata is analogous to the claimed features recited in independent Claim 1.² Applicants respectfully assert that even if Applicants agreed with this assertion, which Applicants do not, Numata still does not teach or render obvious the claimed features recited in independent Claim 1.

Specifically, Applicants respectfully assert that Numata does not teach or render obvious the claimed features of converting means for converting document data into converted data so that the converted data contains only data corresponding to items designated by said designating means which are a portion of the items of the document data, as recited in independent Claim 1. Rather, Applicants respectfully assert that at most Numata states that the fundamental vector generation section 4 provides data corresponding to all of the data of the document, rather than portion of the document data, for example.

Specifically, independent Claim 1 recites "designating means for designating a portion of the items displayed in said displaying means . . . [and] converting means for converting the document data into converted data so that the converted data contains only data corresponding to the items designated by said designating means which are a portion of the items of the document data." Thus, Applicants respectfully request that the rejection of

¹ Column 5, lines 53-59.

² Page 2, lines 24-26, of the Office Action.

independent Claim 1 under 35 U.S.C. § 102(b) be withdrawn, and the allowance of independent Claim 1.

Applicants respectfully assert that independent Claims 7 and 50 are allowable for reasons similar to those of independent Claim 1. Thus, Applicants respectfully request that the rejection of independent Claims 7 and 50 under 35 U.S.C. § 102(b) be withdrawn, and the allowance of independent Claims 7 and 50.

Regarding the rejection of independent Claim 10, as discussed above with respect to independent Claim 1, Numata is directed to the document retrieval device. The Office Action asserts that the equation 18 is analogous to the claimed features of transforming function calculating means, as recited in independent Claim 10. Applicants respectfully assert that even if Applicants agreed with this assertion, which Applicants do not, Numata still does not teach or render obvious the claimed features recited in independent Claim 1.

Specifically, Applicants respectfully assert that Numata does not teach or render obvious the claimed features of transforming function calculating means for calculating a representation transforming function used for projecting a document feature vector onto a space in which similarity between document feature vectors is reflected with a dimensional number different from a dimensional number of the document feature vector, as recited in independent Claim 10. In particular, Applicants respectfully assert that equation 18 shows that the composite vector T is determined by adding vectors G, H, and J, that have been multiplied by scalar quantities w₁, w₂, and w₃. Thus, Applicants respectfully assert that Numata does not show or state equation 18 calculating the vector T having a dimensional number (i.e., a number indicating a number of dimensions) different than a dimensional number of the vectors G, H, or J. Rather, Applicants respectfully assert that the vector T has the same number of dimensions as the vectors G, H, and J, since vector T is obtained by summing vectors G, H, and J.

Specifically, independent Claim 10 recites "transforming function calculating means for calculating a representation transforming function used for projecting the document feature vector onto a space in which similarity between the document feature vectors is reflected." Thus, Applicants respectfully request that the rejection of independent Claim 10 under 35 U.S.C. § 102(b) be withdrawn, and the allowance of independent Claim 10.

Applicants respectfully assert that independent Claim 42 is allowable for reasons similar to those of independent Claim 10. Thus, Applicants respectfully request that the rejection of independent Claim 42 under 35 U.S.C. § 102(b) be withdrawn, and the allowance of independent Claim 42.

Applicants respectfully assert that Claims 2, 3, 8, 9, 11, 13, 43, and 45 are allowable for the same reasons as the independent claims from which they depend, as well as for their own features. Thus, Applicants respectfully request that the rejection of dependent Claims 2, 3, 8, 9, 11, 13, 43, and 45 under 35 U.S.C. § 102(b) be withdrawn, and the allowance of dependent Claims 2, 3, 8, 9, 11, 13, 43, and 45.

Consequently, in view of the present amendment, no further issues are believed to be outstanding in the present application, and the present application is believed to be in condition for formal Allowance. A Notice of Allowance for Claims 1-3, 7-25, and 42-50 is earnestly solicited.

Application No. 09/288,856 Reply to Office Action of July 16, 2004

Should the Examiner deem that any further action is necessary to place this application in even better form for allowance, the Examiner is encouraged to contact the undersigned representative at the below listed telephone number.

Customer Number

22850

Tel: (703) 413-3000 Fax: (703) 413 -2220 (OSMMN 06/04) Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,

MAIER & NEUSTADT, P.C.

Gregory J. Maier /

Registration No. 25,599

Attorney of Record

Philip J. Hoffmann Registration No. 46,340

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